

Work Order ID 133815

June-18-15 1:47:09 PM

133815

Page 1

Item ID: D2500-1-100

Accept

N900040100

Setup Start

NS1

Revision ID:

Stop

NS2

Item Name: Skidtube Extrusion

Start Date: 9/01/15 Start Qty: 90.00

90

Cust Item ID:

Required Date: 9/01/15 Req'd Qty: 90.00

90

Customer:

Reference:

Approvals:

Process Plan:

CL

Date: AUG 19 2015

Tooling:

Date:

Run Start

NR1

QC:

Date:

SPC (Y/N):

Date:

Stop

NR2

Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Tool ID

Tool #

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

Draw Nbr

Revision Nbr

D2500

RevH

100

0.00

100

PURCHASING

Purchasing

Purchasing

Memo

0.00

Issue P/O: 29516

- a) Extrude as per Dwg D2500
- b) Material: 6061-T6 (QQ-A-200/8)
- c) Minimum yield tensile strength = 35 ksi
- d) Minimum ultimate tensile strength = 38 ksi
- e) Minimum elongation = 8%
- f) Order at 100" long
- g) Bon L Canada Inc. tool # 897105
- h) To be packed per DSK 066
- i) Pull test to ASTM standard B221 required.
- j) Material certification is required

EXTREME CARE MUST BE TAKEN TO PROTECT THE OUTSIDE SURFACE OF THE TUBE. THE OUTSIDE SURFACE MUST BE SMOOTH AND FREE FROM SURFACE DEFECTS SUCH AS SCRATCHES, NICKS, OR DENTS.

MUST BE WELL PACKAGE, IF NOT IT WILL BE REFUSE

CL

AUG 19 2015

90
92

Work Order ID 133815

June-18-15 1:47:09 PM

133815

Page 2

Item ID: D2500-1-100

Accept

N900040100

Setup Start ***NS1***

Revision ID:

Stop ***NS2***

Item Name: Skidtube Extrusion

Start Date: 9/01/15 Start Qty: 90.00

90

Cust Item ID:

Required Date: 9/01/15 Req'd Qty: 90.00

90

Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

QC:

Date:

SPC (Y/N):

Date:

Run Start ***NR1***

Stop ***NR2***

Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Tool ID

Tool #

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

110

Receive & Inspect for Damage & Mat'l Certs

0.00

110

Packaging

Memo

0.00

Packaging

Ensure material certification is attached

92

OCT 08 2015

DAS
6
9-89

120

QC6- Inspect dimensions to drawing

0.00

120

QC

Memo

0.00

Quality Control

Check Pull test per Dwg D2500 for compliance page attached. Check hardness with Webster tester

DAS
03
9-89

15-10-21

130

Identify as per dwg & Stock Location:

0.00

130

Packaging

Memo

0.00

Packaging

46
Back Hall

DGC 15-10-21

Work Order ID 133815***133815***

Page 3

Item ID: D2500-1-100

Accept

N900040100Setup Start ***NS1***

Revision ID:

Stop ***NS2***

Item Name: Skidtube Extrusion

Start Date: 9/01/15 Start Qty: 90.00

90

Cust Item ID:

Required Date: 9/01/15 Req'd Qty: 90.00

90

Customer:

Reference:

Approvals:

Process Plan: _____

Date: _____

Tooling: _____

Date: _____

Run Start ***NR1***

QC: _____

Date: _____

SPC (Y/N): _____

Date: _____

Stop ***NR2***Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

140

QC21- Final Inspection - Work Order Release

0.00

140

QC

Memo

0.00

Quality Control

MLJ OCT 2 1 2015

MLJ OCT 2 1 2015

Picklist Print

June-18-15 1:47:08 PM

Page 1

Work Order ID: 133815

133815

Parent Item: D2500-1-100

D2500-1-100

Parent Item Name: Skidtube Extrusion

Start Date: 9/01/15

Required Date: 9/01/15

Start Qty: 90.00

Required Qty: 90.00

Comments: IPP: A05.11.14New Issue KJ/JLMIPP Rev:B as per dwg revH DD
verified by:EC

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
D2500-1-100P		Purchased	No			110	Each	0.0000	1	90 92			
D2500-1-100P									**				
Skidtube Extrusion													

OCT 08 2015

DAS
6
9-89

SPECIFICATION CONTROL DRAWING

D2500-1-XXX EXTRUSION & D2500-3-XXX EXTRUSION

NOTES:

1) MATERIAL: 6061-T6 ALUMINUM PER QQ-A-200/8 OR AMS-QQ-A-200/8 OR ASTM B221

MINIMUM TENSILE YIELD STRENGTH = 35 KSI
MINIMUM ULTIMATE TENSILE STRENGTH = 38 KSI
MINIMUM ELONGATION = 8%

A SAMPLE FROM EACH BATCH WILL BE PULL TESTED TO ASTM STANDARD B221 BY AN APPROVED TESTING FACILITY TO ENSURE THAT THE BATCH MEETS THE ABOVE MINIMUM MECHANICAL PROPERTIES

2) FINISH: N/A

3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED

4) UNITS: INCHES UNLESS OTHERWISE NOTED

5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX

6) IDENTIFICATION: IDENTIFY WITH DART B/N USING FINE POINT PERMANENT INK MARKER

7) WEIGHT: D2500-1 = 0.143 lb/in, D2500-3 = 0.066 lb/in

8) FOR D2500-1 PART NUMBER IS D2500-1-XXX WHERE XXX IS CUT LENGTH (EX. D2500-1-190 IS 190" LONG). D2500-1 EXTRUSION MANUFACTURED FROM:

- A) BON L DIE # 897105 -> PREFERRED
- B) CARADON MIDEAST DIE # PAH-28030
- C) CARADON MTL DIE # MH-18868

9) FOR D2500-3, PART NUMBER IS D2500-3-XXX WHERE XXX IS CUT LENGTH IN INCHES (EX. D2500-3-100 IS 100" LONG). D2500-3 EXTRUSION MANUFACTURED FROM:

- A) CARADON INDALEX DIE # MS-18867

w/o 133815

RELEASED
2010-02-02

H	REDRAW & REFORMAT DWG: CORRECT BON L DIE #	CP	09.07.16
G	TYPO (ZN B8-1), ADD AMS & ASTM MAT'L OPTION (ZN D8-1), TOLERANCES NOW PER CARADON DWG (SHT 2)	PH	07.04.17
F	ADD DIE NUMBERS & 'DIMS IN INCHES' NOTES	DS	07.09.29
E	CHANGE MAT. TO 6061-T6	DS	96.10.24
D	CHANGE MATERIAL TEMPER	DS	96.10.07
C	ADD MATERIAL PROPERTIES	BW	96.04.26
B	ADD D2500-3 WEB	DS	96.03.24
A	CHANGE INTERNAL WEB	DS	96.03.19
REV.	NEW ISSUE	BY	DATE
DESIGN		DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA DRAWING NO. D2500 REV. H SHEET 1 OF 2 TITLE EXTRUSION SCALE NTS	
DRAWN			
CHECKED			
MFG. APPR.			
APPROVED			
DE APPR.		DATE 09.07.16 COPYRIGHT © 1996 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	

8

7

6

5

4

3

2

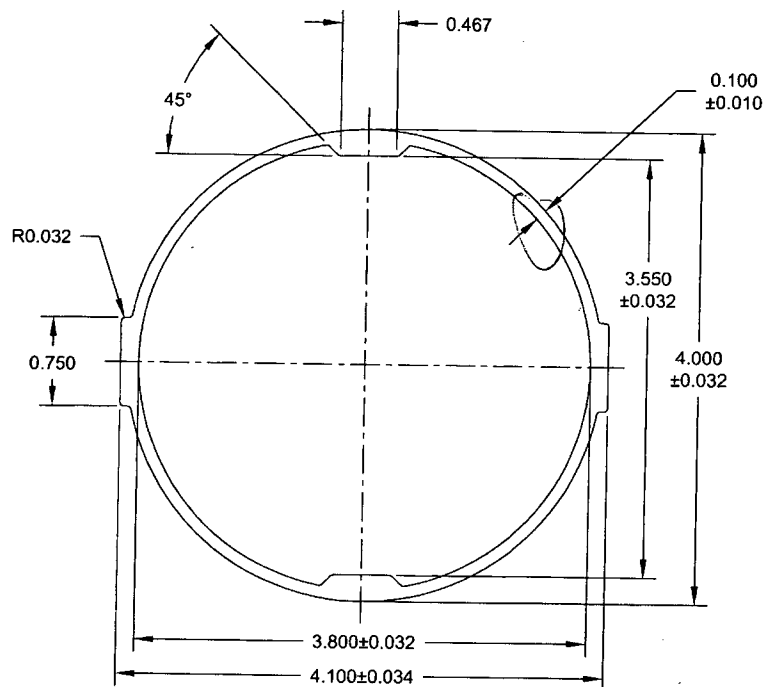
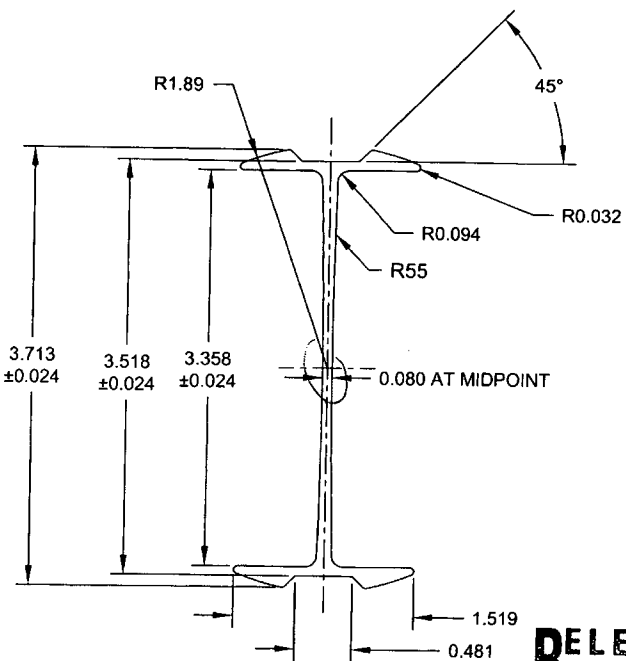
1

D

C

B

A

D2500-1D2500-3

RELEASED
 2010-02-02
MA

DESIGN	<i>4</i>	DART AEROSPACE LTD	
DRAWN	<i>BT</i>	HAWKESBURY, ONTARIO, CANADA	
CHECKED	<i>BT</i>	DRAWING NO.	REV. H
MFG. APPR.	<i>BT</i>	D2500	SHEET 2 OF 2
APPROVED	<i>BT</i>	TITLE	SCALE
DE APPR.	<i>BT</i>	EXTRUSION	NTS
DATE	09.07.16	COPYRIGHT © 1996 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	



Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
Tel: 613 632 9577
Fax: 613 632 1053

PURCHASE ORDER

Purchase Order ID **PO29516**

Purchase Order Date 8/19/2015

PO Print Date 8/19/2015

Page Number 1 of 2

Order From : VC-BON001

SIGNATURE ALUMINUM CANADA INC.
C/O/ T10322C
P.O. BOX 4488, STN A
TORONTO, ON M5W 4H1
CA

Ship To : DART AEROSPACE LTD
1270 ABERDEEN
HAWKESBURY, ON K6A 1K7
CANADA

PAID

Contact Name		Buyer	Chantal Lavoie
Vendor Phone	905-427-6550	Customer POID	
		Customer Tax #	10127-2607
Ship To Contact		Terms	Net 30
Ship To Phone		Currency	CAD
Ship Via:	—	FOB	Destination-Collect
Ship Acct:			

Line Nbr	Reference Vendor Part Number Line Comments Delivery Comments	Description/ Mfg ID	Req Date/ Taxable Promise Date	CD	Req Qty/ Unit of Measure	PO Unit Price	Extended Price
1	D2500-1-100P	Skidtube Extrusion	9/21/2015 Yes 9/21/2015		90.00 Each <i>100</i>	\$54.09	\$4,868.10

EXTRUDE AS PER DWG D2500 REV. H
B133815

EXTREME CARE MUST BE TAKEN TO PROTECT THE OUTSIDE SURFACE OF TUBE
MATERIAL MUST BE SMOOTH AND FREE FROM DEFECT SCRATCHES,NICKS,DENTS

Line Total: \$4,868.10

2	71401-45	PROCUREMENT QUALITY CLAUSES	9/21/2015 No 9/21/2015		1.00 <i>1.10/18</i>	\$0.00	\$0.00
Procurement Quality Clauses							
A005 right of entry							
A012 chemical and physical test report							
A016 personnel qualification							
A017 raw material identification (as applicable)							
A026 certification of material conformance							
A041 quality management system							
A042 dart notification by supplier							
A043 retention of quality documents							

Note:

8/19/2015

SIGNATURE ALUMINUM CANADA
1850 CLEMENTS ROAD
PICKERING ON L1W 3R8

PACKING LIST

ACCT# 46024

SHIP TO / EXPÉDIÉ À

DART AEROSPACE LTD.
1270 ABERDEEN ST.
HAWKESBURY, ON K6A 1K7
CANADA

PHONE: 613-632-5200

SOLD TO / VENDUE À

DART AEROSPACE LTD.
1270 ABERDEEN ST.
HAWKESBURY, ON K6A 1K7
CANADA

PHONE: 613-632-5200

TERMS / FREIGHT

PP

REFER TO
THESE NUMBERS ON
ALL CORRESPONDANCE

REFEREZ-VOUS A CES
NUMEROUS POUR TOUTE
CORRESPONDANCE

PACKING LIST DATE / DATE DU BOD
10-06-15

PACKING LIST NUMBER / N° DE BO
022747

SALES ORDER NUMBER / N° DE CO
120230

LOCATION	TRAILER NUMBER / REMORQUE Nombre	SALESMAN / VENDEUR	CREDIT REP / REP DU CRÉDIT	SALES REP / REP. DE VENTES
PIC	PICKUP	042		R. BLAIS
JOB / FICHIER			FIELD SALES REP / REP REGIONAL DES VENTES	CUST SERVICE REP / SERVICE CLIENTEL
CARRIER / TRANSPORTEUR WILRIDE			G.ATTENBOROU	M2A

CUSTOMER ID / ID DU CLIENT	ORDER DATE / DE LA COM	CUSTOMER PO NUMBER / CLIENT PO Nombre
46024	08/20/15	PO29516
		BILL OF LADING NUMBER / NO. DE CONNAISSEMENT 022747

ITEM NO. / NUMÉRO	ORIGINAL ORDER QUANTITY / Quantité d'ordre ORIGINAL	UNIT / UNITÉ	PREVIOUS SHIPPED QUANTITY / PRÉCÉDENT Quantité livrée	MFG. PART NUMBER / MFG. PARTIE NUMÉRO	ALLOY & TEMPER / ALLIAGE & TEMPER	FINISH DESCRIPTION / DESCRIPTION DE FINITION	NBR OF PKGS / NBR DE PKGS	GROSS LBS / LIVRES BRUT	NET QUANTITY / QUANTITÉ NETTE	UNIT / UNITÉ	QUAN DUI Quant rais
001	1,270	LB		DAA-897105-3	6061 T6		4	1,323	1,252	LB	
	576	KG		D2500-1-100	100.0000 IN			600	568	KG	
	90	PC			Cut(+): 0.1180 Cut(-): 0.0000 Min: -10 % Max: 10 %				92	PC	
						855580 / 277788	1	331	313		23
						855580 / 277789	1	331	313		23
						855580 / 277790	1	331	313		23
						855580 / 277791	1	331	313		23

15/10/18
SB

Transportation/Traffic damages and/or shortage claims are to be noted on the delivery copy of sellers shipping packing lists and signed and dated below by customers authorized representatives.
No return materials will be accepted for credit without permission. The articles and/or services covered by this shipping packing list were produced in accordance with the fair labor standards act of 1938 as amended. Order accepted subject to the terms and conditions stated on the reverse side.

CUSTOMER ACKNOWLEDGEMENT OF GOODS DELIVERED AND CONDITION

Page 1

DATE OF DELIVERY

DRIVER

4	1,323	1,252	LB
	600	568	KG
		92	PC
TOTALS			



signature
aluminum
CANADA INC.

SIGNATURE ALUMINUM CANADA

1850 CLEMENTS RD
PICKERING, ON L1W 3R8

CERTIFICATE OF COMPLIANCE

Cert Date	Cert No.	Sales Order	Page
10/02/2015	5366513	120230	1
Cust PO	BA No	Lot	Date
PO29516	022747	855580	10/06/15

Sold To	Ship To
46024 DART AEROSPACE LTD. 1270 ABERDEEN ST. HAWKESBURY, ON K6A 1K7 CANADA	46024 DART AEROSPACE LTD. 1270 ABERDEEN ST. HAWKESBURY, ON K6A 1K7 CANADA

Item No	Part No	Item Description	Cust Part
001	DAA-897105-3	100" MILL 6061 T6	D2500-1-100
Weight	1,323 LBS		
	1,252 LBS	92 PCS	4 PKGS
AMS-QQ-A-200/8 & ASTM B221-08			Die Desc

Mechanical Tests:

Tensile	Yield			
MPA / KSI	MPA / KSI	% Elongation	Conductivity	HRE
304.2 / 44.1	273.1 / 39.6	10.7	N/A	92

Chemical Analysis:

Si	Fe	Cu	Mn	Mg	Cr	Zn	Ti	V	Zr
0.69	0.19	0.23	0.05	0.89	0.06	0.15	0.02	0.01	0.00

This Material is Made in Canada

This Material is RoHS Compliant

This will certify that the material described herein has been inspected and tested in accordance with Signature Aluminum Canada's standard sampling and testing procedures or in accordance with the requirements of any specification forming a part of the material description to the extent indicated herein. Data of chemical composition for the material and test results from samples representative of the material are set forth above hereof or in any attachments hereto. This information shows that the material meets the applicable requirements. Inspection and test records are maintained on file. This certificate shall be deemed apart of and subject to the terms and conditions of warranty set forth on the reverse side of our order acknowledgement form. No other warranties are applicable.

S. Mazzotta
Director of Quality
Signature Aluminum Canada Inc



ISO 9001/TS16949 Registered Company

Visit us at www.signaturealum.com

MATERIAL RECEIPT INSPECTION FORM

MATERIAL: 6061-T6 (QB-A-200/8)

PO / BATCH NO.: PO# 29516 / B 133815

DATE: 15-10-21

MATERIAL CERT REC'D: Yes
 QUANTITY RECEIVED: 92
 QUANTITY INSPECTED: 92
 QUANTITY REJECTED: 0

THICKNESS ORDERED: 0.100
 THICKNESS RECEIVED: 0.100
 SHEET SIZE ORDERED: 101.4
 SHEET SIZE RECEIVED: 101.4

DESCRIPTION	NCR (Check Y/N)	COMMENTS
SURFACE DAMAGE	Y (N)	
CORRECT FINISH	Y (N)	
CORROSION	Y (N)	
CORRECT GRAIN DIRECTION	Y (N)	
CORRECT MATERIAL	Y (N)	
CORRECT THICKNESS	Y (N)	
PHOTO REQUIRED	Y (N)	
CORRECT MATERIAL	Y (N)	
CORRECT REF # TO LINK CERT	Y (N)	29516
CORRECT MATERIAL IDENTIFICATION	Y (N)	
CORRECT M# ON THE MATERIAL	Y (N)	
DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF	Y (N)	
DOES THIS REQUIRE AN EXTRUSION REPORT	Y (N)	

CUT SAMPLE PIECE OF MATERIAL AND PREFORM A HARDNESS CHECK. RECORD RESULTS BELOW				
TYPE OF MATERIAL	HRC	HRB	DUR A	DUR D
SIZE OF TEST SAMPLE				
HARDNESS / DUROMETER READING				

testers located in the Quality Office

QC 18 INSPECTION		ENGINEERING SIGNOFF (if required)	
INSPECTED BY: <u>DAS</u>	SIGNED OFF BY: <u>DAS</u>		
DATE: <u>10-21-2021</u>	DATE: <u>10-21-2021</u>		

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in